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Committee on the Peaceful
Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 23 December 1998 from the Permanent Mission of Argentina to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Argentina to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,[1] has the honour to submit information concerning the launch of satellite SAC-A (see annex). The information on the satellite is included in the register established by the Comisión Nacional de Actividades Espaciales (CONAE) under decree 125/95.

[1] General Assembly resolution 3235 (XXIX), annex, of 12 November 1974

Annex[2]

Registration data on space object launched by Argentina

Name of space object:	SAC-A
Registration number:	RA 4
Date of launch:	14 December 1998
Location of launch site:	Kennedy Space Center
Operator of object launched:	National Commission for Space Activities (CONAE)
Basic orbital parameters:	Nodal period: 92 minutes Inclination: 51.6 degrees Apogee: 384 kilometres Perigee: 362 kilometres
Launch vehicle:	Space shuttle Endeavour (Mission STS-88)
Launching agency:	National Aeronautics and Space Administration (NASA)
General function of space object:	Technology

[2] The registration data are reproduced in the form in which they were received.

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Note verbale dated 1 February 1999 from the Permanent Mission of Sweden to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Sweden to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit information concerning the launching of Swedish satellite Astrid 2, registration number 1998-72B, on 10 December 1998 at Plesetsk, Russian Federation (see annex I). The status of the register of Swedish objects launched into outer space as of January 1999 is given in annex II.

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-81237 (E)

Annex I

Registration data on space objects launched by Sweden*

1. Launching State: Sweden
2. Name and registration number: Astrid 2, 1998-72B
3. Date and location of launch: 10 December 1998
   Plesetsk, Russian Federation
4. Basic orbital parameters:
   (a) Nodal period 105.1 minutes
   (b) Inclination 83 degrees
   (c) Apogee 1,014 km
   (d) Perigee 980 km
5. General description and mission of the space object:

Spin-stabilized, sun-pointing microsatellite (30 kg) for research. The scientific mission: High-resolution measurements of electrical and magnetic fields in the auroral region, electron density measurements, high- resolution measurements of the electron and ion distribution functions and ultraviolet auroral imaging and atmospheric ultra violet-absorption measurements.

* The registration data are reproduced in the form in which they were received.

Annex II. Register of Swedish objects launched into outer space (status as of January 1999)*

Name	Registration number	Launch date (and site)	Nodal period	Inclination (degrees)	Apogee (km)	Perigee (km)	Function/end of life measures	General mission
Viking	1986-19 B	22 February 1986 (Kourou, French Guiana)	262.2 minutes	98.78	13 530	814.4	17 May 1987	Investigation of plasma physics and the auroral phenomena.
Tele-X	1989-27A	2 April 1989 (Kourou, French Guiana)	24 hours	0	35 790 (Geostationary, 5° E)		16 January 1998 "Graveyard orbit"	Telecommunications, direct television broadcasting and data communication.
Sirius 1[1]	1989-67 A	27 August 1989 (Florida, United States of America)	24 hours	0	35 790 (Geostationary, 5.2° E)			High-power television broadcasting.
Freja	1992-64 A	6 October 1992 (Jiuquan, China)	108.9 minutes	63	1 756	601	14 October 1996	High-resolution measurements in the upper ionosphere and lower magnetosphere.
Astrid	1995-2 B	24 January 1995 (Plesetsk, Russian Federation)	105.1 minutes	82.9	1 026	968	27 September 1995	Investigation of near-space plasma with emphasis on neutral particle phenomena.
Sirius 2	1997-71 A	12 November 1997 (Kourou, French Guiana)	24 hours	0	35 790 (Geostationary, 4.8° E)			High-power television broadcasting and data communication.
Sirius 3	1998-56 B	5 October 1998 (Kourou, French Guiana)	24 hours	0	35 790 (Geostationary, 28° E till October 1999, thereafter 5° E)			Broadcasting satellite for television, radio and data with 15 high-EIRP transponders.
Astrid 2	1998-72 B	10 December 1998 (Plesetsk, Russian Federation)	105.1 minutes	83	1 014	968		High-resolution measurements of electrical and magnetic fields in the auroral region.

Source: Swedish National Space Board.

*The registration data are reproduced in the form in which they were received.

[1]Bought in orbit in 1996.

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Committee on the Peaceful
Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 3 March 1999 from the Permanent Mission of the United States of America to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the United States of America to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for the United States space launches for the period July 1998-November 1998 (see annex).

* See General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-82696 (E)

Annex*

Registration data for United States space launches

The following report supplements the registration data for the United States launches as of 31 July 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
NONE						
The following objects not previously reported have been identified since the last report:						
1967-092L	25 September 1967	106.3	89.3	1 105	1 026	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 31 July 1998:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 31 July 1998:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 31 July 1998:						
1965-082AB, 1971-067J, 1989-089AD, 1989-089CG, 1994-029BE, 1994-02GA, 1994-029HU, 1994-029JV, 1994-029PB, 1994-029RF, 1994-029YG						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
The general function of space object 1996-065A (document ST/SG/SER.E/322) should read: "Reusable space transportation systems". For object 1996-065C it should read: "Spacecraft engaged in investigation of spaceflight techniques and technology".						

*The registration data are reproduced in the form in which they were received.

Registration data for United States space launches

The following report supplements the registration data for the United States launches as of 31 August 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit						
1998-046A	02 August 1998	101.3	45.0	824	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046B	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046C	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046D	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046E	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046F	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046G	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1998-046H	02 August 1998	101.4	45.0	826	819.5	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-046J	02 August 1998	94.1	44.9	693	262	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-046K	02 August 1998	96.7	42.6	825	389	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-046L	02 August 1998	101.4	45.0	830	819	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report:						
1994-029ADR	19 May 1994	101.4	81.6	1 132	516	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADS	19 May 1994	98.6	82.1	835	562	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADT	19 May 1994	96.9	82.1	671	577	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADU	19 May 1994	97.6	82.1	722	578	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADV	19 May 1994	97.3	81.8	727	576	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADW	19 May 1994	96.4	81.9	620	556	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADX	19 May 1994	102.9	81.8	1 220	611	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1994-029ADY	19 May 1994	100.5	81.8	1 015	546	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029ADZ	19 May 1994	103.8	82.6	975	947	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AEA	19 May 1994	103.8	82.6	975	947	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AEB	19 May 1994	97.2	82.1	739	548	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AEC	19 May 1994	100.5	82.0	1 002	558	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AED	19 May 1994	123.2	82.3	3 049	620	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AEE	19 May 1994	121.4	82.2	2 904	625	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 31 August 1998:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 31 August 1998:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 31 August 1998:						
1978-064G, 1978-064H, 1978-068G, 1978-068H, 1978-096G, 1989-089BQ, 1992-019C, 1994-010F, 1994-017M, 1994-029FB, 1994-029JM, 1994-029KC, 1994-029UN, 1994-029ACV						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

Registration data for United States space launches

The following report supplements the registration data for the United States launches as of 30 September 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1998-051A	08 September 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-051B	08 September 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-051C	08 September 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-051D	8 September 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-051E	08 September 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-051F	08 September 1998	93.011	83.537	522.826	321.1	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-052A	15 September 1998	1 436	.04	35 796	35 777	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053A	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053B	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053C	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1998-053D	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053E	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053F	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053G	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053H	23 September 1998	101.2	45.01	826.0	811.0	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-053J	23 September 1998	91.1	45.0	413.0	251.0	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-053K	23 September 1998	100.2	44.5	826.0	729.0	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report:						
1966-034C	22 April 1966	115.8	82.3	2 652	353	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1977-018B	10 March 1977	319.4	24.4	17 907	295	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1974-033F	17 May 1974	1 239.4	12.6	32 863	30 825	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 30 September 1998:						
NONE						

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 30 September 1998:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 30 September 1998:						
1961-015AS, 1971-067M, 1977-065AF, 1978-039C, 1981-059H, 1989-089AL, 1989-089BL, 1994-029Q, 1994-029DG, 1994-029FY, 1994-029HW, 1994-029ME, 1994-029WK, 1994-029XM, 1994-029YP, 1994-029ADM, 1994-029ADQ, 1997-065B						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
The general function of space object 1997-045A (document ST/SG/SER.E/339) should read: Spacecraft engaged in practical applications and uses of space technology such as weather or communications						

Registration data for United States space launches

The following report supplements the registration data for the United States launches as of 31 October 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1998-055A	02 October 1998	98.8	85.0	713	695	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-055B	02 October 1998	98.4	85.1	711	684	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-057B	09 October 1998	610.7	25.0	34 766	167	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-058A	20 October 1998	1 436.2	6.0	36 768	34 811	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-058B	20 October 1998	448.2	26.9	25 733	313	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-060B	23 October 1998	99.9	25.0	777	742	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-060C	23 October 1998	100	25.0	776	747	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-061A	24 October 1998	101.2	28.5	189	189	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1998-061B	24 October 1998	101.2	31.5	1 082	551	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-061C	24 October 1998	101.2	31.5	1 082	545	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-061D	24 October 1998	100.8	31.5	189	189	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-063A	27 October 1998	1 430.4	.1	35 743	35 605	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-063B	27 October 1998	1 431.4	.01	35 864	35 526	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-064A	29 October 1998	95.8	28.5	560	550	Reusable space transportation system
1998-064B	29 October 1998	95.9	28.4	574	552	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-064C	29 October 1998	95.8	28.5	560	550	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following objects not previously reported have been identified since the last report:						
1990-002D	09 January 1990	98.1	26.6	1 025	307	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 31 October 1998:						
NONE						

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 31 October 1998:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 31 October 1998:						
1969-082HD, 1977-065FW, 1981-059G, 1989-089E, 1989-089BL, 1990-037C, 1990-105B, 1994-029BH, 1994-029CB, 1994-029DF, 1994-029EM, 1994-029JM, 1994-029LF, 1994-029LZ, 1994-029QG, 1994-029QZ, 1994-029WH, 1994-029AAZ						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

Registration data for United States space launches

The following report supplements the registration data for the United States launches as of 30 November 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1998-066A	06 November 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-066B	06 November 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-066C	06 November 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-066D	06 November 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-066E	06 November 1998	100.467	86.40	780	780	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-066F	06 November 1998	92.33	82.58	454.1	323.4	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-068B	22 November 1998	103.3	19.7	1 546	283.3	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-068C	22 November 1998	670.8	19.6	36 725	1 286	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report:						
1966-040D	15 May 1966	107.6	100.5	1 152	1 085	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 30 November 1998:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 30 November 1998:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 30 November 1998:						
1989-089CF, 1990-028A, 1998-064B, 1998-064A						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

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COMMITTEE ON THE PEACEFUL
USES OF OUTER SPACE

INFORMATION FURNISHED IN CONFORMITY WITH THE CONVENTION ON REGISTRATION OF OBJECTS LAUNCHED INTO OUTER SPACE

Note verbale dated 10 March 1999 from the Permanent Mission of the Russian Federation to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the Russian Federation to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for the Russian space launches for the period from September to December 1998 and also on the space objects which ceased to exist during the same period of time (see annex).

*General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-82496 (E)

*Annex**

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN SEPTEMBER 1998

1. In September 1998, the Russian Federation launched the following space objects:

No	*Name of space object*	*Date of launching*	*Basic orbit characteristics*				*General purpose of space object*
			Apogee (km)	*Perigee (km)*	*Inclination (degrees)*	*Period (minutes)*	
3048	Molniya-1 (launched by a Molniya-M carrier rocket from the Plesetsk launch site)	29 September	40 860	457	62.8	737	Operation of long-range telephone and telegraph radio communications system and transmission of television programmes to stations in the Orbita network.

2. At 2400 hours Moscow time on 30 September 1998, no space objects had been found to have ceased to exist in Earth orbit in September 1998.

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*The registration data are reproduced in the form in which they were received.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN OCTOBER 1998

1. In October 1998, the Russian Federation launched the following space objects:

No	*Name of space object*	*Date of launching*	*Basic orbit characteristics*				*General purpose of space object*
			Apogee (km)	*Perigee (km)*	*Inclination (degrees)*	*Period (minutes)*	
3049	Progress M-40 (launched by a Soyuz carrier rocket from the Baikonur launch site)	25 October	243	194	51.6	88.6	Delivery to the Mir manned orbital station of consumables and various cargoes.

2. The following space objects ceased to exist in October 1998 and were no longer in Earth orbit at 2400 hours Moscow time on 31 October 1998: 1998-038A (Cosmos-2358) and 1998-031A (Progress M-39).

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN NOVEMBER 1998

1. In November 1998, the Russian Federation launched the following space objects:

No	*Name of space object*	*Date of launching*	*Basic orbit characteristics*				*General purpose of space object*
			Apogee (km)	*Perigee (km)*	*Inclination (degrees)*	*Period (minutes)*	
3050	RS-18 (launched into Earth orbit from the Mir manned station)	10 November	372	355	51.7	91.6	Working model of the first artificial Earth satellite, produced by Russian and French schoolchildren.
American registration	Zarya (launched by a Proton carrier rocket from the Baikonur launch site)	20 November	349.2	184.5	51.6	89.5	The Zarya functional cargo block is the first element of the International Space Station (ISS), designed to fulfil a number of interrelated functions in connection with both the assembly of the station and throughout its entire period of operation.

2. On 4 November 1998, the American direct television broadcasting satellite PANAMSAT-8 was placed in Earth orbit by a Proton carrier rocket from the Baikonur launch site. The satellite is owned and operated by the PanAmSat Corporation.

3. The following space object ceased to exist in November 1998 and was no longer in Earth orbit at 2400 hours Moscow time on 30 November 1998: 1997-058C (Inspektor).

REGISTRATION DATA ON SPACE OBJECTS FOR WHICH THE RUSSIAN FEDERATION IS THE "LAUNCH STATE" IN THE ORGANIZATION OF SPACE OBJECT LAUNCHES

No.	*Name of space object*	*Date of launching*	*Basic orbit characteristics*				*General purpose of space object*
			Apogee (km)	*Perigee (km)*	*Inclination (degrees)*	*Period (minutes)*	
1	BONUM-1 (launched by a Delta 2 carrier rocket from Cape Canaveral, United States of America)	23 November	35 788	35 788	0.01	1 436.23	The direct television broadcasting satellite belonging to the Russian company BONUM-1 is intended for transmission of television programmes on the NTV-Plus network.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN DECEMBER 1998

1. In December 1998, the Russian Federation launched the following space objects:

No.	*Name of space object*	*Date of launching*	*Basic orbit characteristics*				*General purpose of space object*
			Apogee (km)	*Perigee (km)*	*Inclination (degrees)*	*Period (minutes)*	
3051	Nadezhda (launched by a Cosmos carrier rocket from the Plesetsk launch site)	10 December	1 026.6	995.87	82.95	105	The space object is intended for determination of the position of Russian Federation shipping at all points on all oceans and for assignments as part of the COSPAS-SARSAT system.
3052	Cosmos-2361 (launched by a Cosmos carrier rocket from the Plesetsk launch site)	24 December	1 016.9	987.9	83	104.88	The space object is intended for assignments on behalf of the Ministry of Defence of the Russian Federation.
3053	Cosmos-2362* (launched by a Proton carrier rocket from the Baikonur launch site)	30 December	19 150	19 124	64.8	675	The space object is intended for operation as part of the GLONASS space navigation system.
3054	Cosmos-2363*	30 December	"	"	"	"	"
3055	Cosmos-2364*	30 December	"	"	"	"	"

**Note*: Space objects Cosmos-2362 to 2364 were launched by a single Proton carrier rocket from the Baikonur launch site.

2. On 10 December 1998, the Swedish satellite Astrid-2 was placed in Earth orbit simultaneously with the space object Nadezhda from a single Cosmos carrier rocket. The Astrid-2 satellite is intended for measurement of electromagnetic field characteristics in the region of polar auroras.

3. At 2400 hours Moscow time on 31 December 1998, no space objects had been found to have ceased to exist in Earth orbit in December 1998.

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Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 19 April 1999 from the Permanent Mission of Japan to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Japan to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit information concerning the launching of three Japanese satellites: COMETS (KAKEHASHI), BSAT-1B and Planet-B (NOZOMI) (see annex).

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-84383 (E)

Annex

Registration data for Japanese space launches*

1.	Name:	Communications and Broadcasting Engineering Test Satellite (COMETS) (KAKEHASHI)
2.	Designation:	1998-011A
3.	Name of launching State:	Japan
4.	Date of launch:	21 February 1998 (07:55 GMT)
5.	Location of launch:	Japan (Tanegashima Space Center)
6.	Basic orbital parameters (as of 30 May 1998):	
	(1) Nodal period:	319 minutes
	(2) Inclination:	30 degrees
	(3) Apogee:	17,711 kilometres
	(4) Perigee:	473 kilometres
7.	General function:	Experiments on advanced mobile satellite communications, inter-orbit communications, advanced satellite broadcasting etc.
8.	Launch vehicle:	H-II (Flight No. 5)
9.	Launching organization:	National Space Development Agency of Japan
10.	Note:	Injection into the geostationary orbit was not successful because of the short second burning period of the upper-stage engine.

* The registration data are reproduced in the form in which they were received.

1.	Name:	BSAT-1B
2.	Designation:	1998-024B
3.	Name of launching State:	Japan (France)
4.	Date of launch:	28 April 1998 (22:53 GMT)
5.	Location of launch:	French Guiana (Kourou)
6.	Basic orbital parameters (as of 3 July 1998):	
	(1) Nodal period:	1,436 minutes
	(2) Inclination:	0.064 degrees
	(3) Apogee:	35,803 kilometres
	(4) Perigee:	35,783 kilometres
7.	General function:	Domestic direct broadcasting
8.	Launch vehicle:	Ariane 44P
9.	Launching organization:	Arianespace

1.	Name:	PLANET-B (NOZOMI)
2.	Designation:	1998-041A
3.	Name of launching State:	Japan
4.	Date of launch:	3 July 1998 (18:12 GMT)
5.	Location of launch:	Japan (Kagoshima Space Center)
6.	Basic orbital parameters (heliocentric orbit as of 6 January 1999):	
	(1) Nodal period:	485 days
	(2) Inclination:	3 degrees
	(3) Aphelium:	216,000,000 kilometres
	(4) Perihelium:	146,000,000 kilometres
7.	General function:	Interaction between solar wind and Martian upper atmosphere
8.	Launch vehicle:	M-V (Flight No.3)
9.	Launching organization:	Institute of Space and Aeronautical Science
10.	Note:	The orbit is to be changed to perform Earth swing-bys.

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Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 10 May 1999 from the Permanent Mission of China to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of China to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for objects launched by China in the period from September 1997 to December 1998 (see annex).

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-84418 (E)

Annex

Registration data on space objects launched by China from September 1997 to December 1998*

1. From September 1997 to December 1998, China launched the following space objects:

Name of space object	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
Two mass and frequency simulators (MFS) of Motorola Iridium	1 September 1997	About 100 minutes	86.38	638.8	626.2	None
Motorola Iridium No. 42, No. 44 (launched by a Chinese launcher LM-2C/SD from Taiyuan Satellite Launch Center in China)	8 December 1997	About 100 minutes	86.29	632.0	628.8	Motorola Iridium system used for telecommunication service
Motorola Iridium No. 51, No. 61 (launched by a Chinese launcher LM-2C/SD from Taiyuan Satellite Launch Center in China)	26 March 1998	About 100 minutes	86.4	628.2	626.7	Motorola Iridium system used for telecommunication service
Motorola Iridium No. 69, No. 71 (launched by a Chinese launcher LM-2C/SD from Taiyuan Satellite Launch Center in China)	2 May 1998	About 100 minutes	86.35	634.49	632.49	Motorola Iridium system used for telecommunication service
Motorola Iridium No. 76, No. 03 (launched by a Chinese launcher LM-2C/SD from Taiyuan Satellite Launch Center in China)	20 August 1998	About 100 minutes	86.4	635.6	612.35	Motorola Iridium system used for telecommunication service
Motorola Iridium No. 88, No. 89 (launched by a Chinese launcher LM-2C/SD from Taiyuan Satellite Launch Center in China)	19 December 1998	About 100 minutes	86.35	646.92	629.9	Motorola Iridium system used for telecommunication service

2. The above-mentioned orbit parameters are the initial orbit parameters of the space objects. Motorola Inc. is responsible for Iridium system operation; the nominal orbit parameters should be provided by Motorola Inc.

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*The registration data are reproduced in the form in which they were received.

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Committee on the Peaceful Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 3 June 1999 from the Permanent Mission of India to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of India to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and has the honour to transmit, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* information concerning the launching of satellites INSAT-2E and IRS-P4 (see annex).

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-85225 (E)

Annex

Registration data for Indian space objects*

Name of the launching State:	India	
An appropriate designator of the space object or its registration number:	INSAT-2E	
Date and place of launch:	Launch vehicle:	ARIANESPACE flight 42P
	Launch date:	3 April 1999
	Launch site:	Guiana Space Centre (CSG) Kourou, French Guiana
Orbit character:	Geostationary orbit	
Basic orbital parameters:	Longitude:	83±0.1 degrees E
	Nodal period:	1,436 minutes
	Inclination:	< 0.1 degrees
	Apogee radius:	42,188 kilometres
	Perigee radius:	42,142 kilometres
General function of the space object:	INSAT-2E is a multi-purpose satellite that will provide the following services:	
	Domestic and international telecommunication services	
	Radio and TV programme distribution	
	Meteorological satellite services	

* The registration data are reproduced in the form in which they were received.

Name of the launching State:	India	
An appropriate designator of the space object or its registration number:	Indian Remote Sensing (IRS-P4) satellite (Oceansat-1)	
Date and place of launch:	Launch vehicle:	Polar Satellite Launch Vehicle (PSLV-C2)
	Launch date:	26 May 1999
	Launch site:	Sriharikota Range (SAHR), India
Basic orbital parameters:	Apogee height:	733.9 kilometres
	Perigee height:	717.5 kilometres
	Inclination:	98.385 degrees
	Orbital time period:	99.43 minutes
General function of the space object:	The Indian Remote Sensing (IRS-P4) satellite carries an Ocean Colour Monitor (OCM) payload and a Multi-frequency Scanning Microwave Radiometer (MSMR). OCM will observe the optical properties of phytoplankton pigments, inorganic suspended sediments and yellow substance of the oceans. MSMR operates in four frequencies and measures geophysical parameters such as atmospheric water vapour, sea surface temperature, precipitation over oceans, ocean surface winds, etc.	
State of jurisdiction:	India	

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Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 7 June 1999 from the Permanent Mission of the Republic of Korea to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the Republic of Korea to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and has the honour to transmit, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* information concerning the launching of the KITSAT-3 satellite (see annex).

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-85650 (E)

Annex

Registration data for space objects launched by the Republic of Korea in May 1999*

Name of space object:	KITSAT-3	
Date of launch:	26 May 1999	
Basic orbital characteristics:	Nodal period:	99.4 minutes
	Inclination:	98.3824 degrees
	Apogee:	738.607 kilometres
	Perigee:	717.640 kilometres

General function of space object:

Satellite engaged in experimental applications of space technology as follows:

Earth imaging;
High-energy particle experiment;
Electron temperature experiment;
Measurement of radiation effects on micro-electronics;
Investigation of the Earth magnetic field.

* The registration data are reproduced in the form in which they were received.

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Note verbale dated 8 July 1999 from the Permanent Mission of China to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of China to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for objects launched by China in the period from March to June 1999 (see annex).

* General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

Annex

Registration data on space objects launched by China from March to June 1999

1. On 21 March 1999, the AsiaSat 3S was launched by the Russian Proton rocket from Baikonur Cosmodrome in Kazakhstan.

Number	*Name of space object*	*Date of launching*	*Basic orbital characteristics*				*General function of space objects*
			Nodal period (minutes)	*Inclination (degrees)*	*Apogee radius (km)*	*Perigee radius (km)*	
1999/07	AsiaSat 3S (launched by the Russian Proton rocket from Baikonur Cosmodrome in Kazakhstan)	21 March 1999	1 436	0±0.05	42 169.5	42 159	The AsiaSat 3S is owned by Asia Satellite Telecommunications Co. Ltd., Hong Kong Speical Administrative Region of China. The orbital position of AsiaSat 3S is 105.5° E. It provides fixed satellite telecommunication and broadcasting services. Its operational lifetime is about 16 years.

Note: The satellites registered in document ST/SG/SER.E/356, containing registration data on space objects lauched by China from September 1997 to December 1998, have registration numbers 1999/01-1999/06.

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*The registration data are reproduced in the form in which they were received.

2. On 10 May and 12 June 1999, China launched the following space objects from Taiyuan Satellite Launch Center in China:

Number	*Name of space object*	*Date of launching*	*Basic orbital characteristics*				*General function of space objects*
			Nodal period (minutes)	*Inclination (degrees)*	*Apogee height (km)*	*Perigee height (km)*	
1999/08A[a]	FY-1 C meteorological satellite (launched by the Chinese LM-4B launcher)	10 May 1999	102	98.8	870	859	The FY-1 C is a polar-orbiting meteorological satellite (satellite operation is normal).
1999/08B	SJ-5 scientific experimental satellite (piggyback-launched by the Chinese LM-4B launcher)	10 May 1999	102	98.8	869	858	The SJ-5 is a scientific experimental satellite (satellite operation is normal).
1999/09A[b]	Motorola Iridium No. 92 (launched by LM-2C/SD launcher)	12 June 1999	About 100	86.39	634.55	621.15	Motorola Iridium system used for telecommunication service
1999/09B	Motorola Iridium No. 93 (launched by LM-2C/SD launcher)	12 June 1999	About 100	86.39	634.55	621.15	Motorola Iridium system used for telecommunication service

Notes: CNSA/REG. No. 02: serial number of space object registration form of the China National Space Administration (CNSA). 1999/07/01: registration date of CNSA.

[a] 1999/08A or 08B: 1999 indicates the registration year of the space object launched; 08 indicates the registration serial number of CNSA; 08A (or 08B) indicates two space objects launched by one launcher.

[b] The orbit parameters of 1999/09A and 1999/09B are the initial orbit parameters of the space objects. Motorola Inc. is responsible for Iridium system operation; the nominal orbit parameters should be provided by Motorola Inc.

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Note verbale dated 17 June 1999 from the Permanent Mission of the United States of America to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the United States of America to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for the United States space launches for the period December 1998-April 1999 (see annex).

* See General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

Annex[*]

REGISTRATION DATA FOR UNITED STATES SPACE LAUNCHES

The following report supplements the registration data for the United States launches as of 31 December 1998. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1998-069C	04 December 1998	92.3	51.6	394	380	Spacecraft engaged in investigation of space flight techniques and technology
1998-069D	04 December 1998	92.1	51.6	382	374	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-069E	04 December 1998	92.1	51.6	381	371	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-071A	06 December 1998	97.6	69.9	656	644	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-071B	06 December 1998	97.5	69.9	652	643	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-071C	06 December 1998	96.8	69.9	622	603	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

[*] The registration data are reproduced in the form in which they were received.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1998-073A	11 December 1998	88.2	28.4	201	189	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-073C	11 December 1998	95.5	28.4	908	187	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-075A	21 December 1998	1435.8	0.1	35769	35767	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following objects not previously reported have been identified since the last report:						
1965-109G	22 December 1965	103.9	89.1	1052	876	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1983-078E	31 July 1983	711.5	63.5	39210	831	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1988-077S	02 September 1988	720.7	26.7	40057	391	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1991-017D	08 March 1991	93.2	68.0	485	380	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1994-029AEF	19 May 1994	122.5	82.3	2989	622	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects not previously reported have been identified since the last report, but no longer in orbit as of 2400Z 31 December 1998:						
NONE						
The objects achieved orbit since the last report but are no longer in orbit as of 31 December 1998:						
1998-069A	04 December 1998	92.4	51.6	399	382	Reusable space transportation system
1998-073B	11 December 1998	95.0	23.9	878	170	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects identified in a previous report are no longer in orbit as of 2400Z 31 December 1998:						
1965-082LD; 1965-082MT; 1975-052BF; 1975-100C; 1993-077B; 1994-029ADW; 1994-029BD; 1994-029EY; 1994-029JD; 1994-029LL; 1994-029MP; 1994-029TY; 1996-024BD; 1997-084J						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

REGISTRATION DATA FOR UNITED STATES SPACE LAUNCHES

The following report supplements the registration data for the United States launches as of 31 January 1999. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1999-001A	03 January 1999	94.7	28.4	772	238	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-001B	03 January 1999	94.7	28.4	771	238	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-001C	03 January 1999	92.0	25.8	530	218	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report:						
1966-040E	15 May 1966	107.9	100.4	1171	1089	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1966-040F	15 May 1966	107.9	100.4	1162	1102	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1966-040G	15 May 1966	107.9	100.5	1170	1088	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1991-076L	08 November 1991	105.5	63.4	1016	1015	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1992-086F	02 December 1992	102.8	57.0	891	890	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1996-029K	12 May 1996	107.4	63.4	1161	1053	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1998-055C	03 October 1998	98.8	85.0	713	695	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z 31 January 1999:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 31 January 1999:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z 31 January 1999:						
1970-025N; 1989-089W; 1989-089M; 1989-089N; 1989-089BM; 1989-089BN; 1991-017B; 1994-029ACA; 1994-029ADV; 1994-029BQ; 1994-029CK; 1994-029EH; 1994-029HJ; 1994-029NW; 1994-029U; 1994-029S; 1994-029WG; 1994-029WS; 1998-046J; 1998-066F						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

REGISTRATION DATA FOR UNITED STATES SPACE LAUNCHES

The following report supplements the registration data for the United States launches as of 28 February 1999. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1999-003A	07 February 1999	1436.1	0.04	35797	35776	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-003B	07 February 1999	164.2	22.5	6815	298	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-003C	07 February 1999	1436.1	0.04	35797	35776	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-005A	15 February 1999	1436.2	0.04	35798	35777	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-006B	16 February 1999	2122.3	25.6	96391	264	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-008A	23 February 1999	101.7	98.7	847	828	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-008D	23 February 1999	99.9	96.5	864	645	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of Launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects not previously reported have been identified since the last report:						
NONE						
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 28 February 1998:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 28 February 1999:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400Z on 28 February 1999:						
1963-014EW; 1969-082KQ; 1971-067L; 1982-006C; 1989-089BZ; 1993-017D; 1994-029J; 1994-029KX; 1994-029LB; 1994-029RJ; 1994-029XR; 1995-013B						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions the should be made to previously reported data:						
NONE						

REGISTRATION DATA FOR UNITED STATES SPACE LAUNCHES

The following report supplements the registration data for the United States launches as of 31 March 1999. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1999-011A	05 March 1999	95.9	97.5	605	553	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-011B	05 March 1999	95.9	97.5	599	553	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-011C	05 March 1999	95.9	97.5	602	552	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not preciously reported have been identified since the last report:						
1994-029AEG	19 May 1994	98.9	82.2	870	554	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z 31 March 1998:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z 31 March 1999:						
NONE						
The following objects identified on a previous report are no longer in orbit as of 2400 31 March 1999:						
1961-015BZ; 1984-123B; 1994-029AP; 1994-029AIDS; 1994-029MV; 1994-029SJ; 1994-029AAC; 1996-029G; 1996-049F; 1998-008F; 1998-051F; 1998-069E; 1998-071C; 1999-001C						

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions that should be made to previously reported data:						
NONE						

REGISTRATION DATA FOR UNITED STATES SPACE LAUNCHES

The following report supplements the registration data for the United States launches as of 30 April 1999. All launches were made from the territory of the United States unless otherwise specified.

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects were launched since the last report and remain in orbit:						
1999-017A	09 April 1999	94.1	28.6	763	200	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-017B	09 April 1999	92.7	28.6	630	193	Spent boosters, spent maneuvering stages, shroud and other non-functional objects
1999-017C	09 April 1999	94.1	28.6	763	200	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-017D	09 April 1999	94.1	28.6	763	200	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-017E	09 April 1999	94.1	28.6	763	200	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-018B	12 April 1999	812.1	20.2	44678	231	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
1999-020A	15 April 1999	98.5	98.2	700	678	Spacecraft engaged in investigation of space flight techniques and technology
1999-020B	15 April 1999	92.7	107.6	628	181	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
1999-023A	30 April 1999	88.5	28.6	210	202	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1999-023B	30 April 1999	88.5	28.6	210	202	Spent boosters, spent maneuvering stages, shrouds and other non-functional objects
The following objects not previously reported have been identified since the last report:						
NONE						
The following objects not previously reported have been identified since the last report but are no longer in orbit as of 2400Z on 30 April 1999:						
NONE						
The following objects achieved orbit since the last report but are no longer in orbit as of 2400Z on 30 April 1999:						
NONE						

International designation	*Date of launch*	*Basic orbital characteristics*				*General function of space objects*
		Nodal period (min)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*	
The following objects identified on a previous report are no longer in orbit as of 2400Z 30 April 1999:						
1975-004W; 1978-026HT; 1983-094B; 1987-053D; 1994-029AA; 1994-029DW; 1994-029JF; 1994-029SG; 1994-029SP; 1994-029WV; 1994-029ZH; 1998-057B; 1998-069D						
The following objects were launched since the last report but did not achieve orbit:						
NONE						
Revisions the should be made to previously reported data:						
NONE						

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Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 20 September 1999 from the Permanent Mission of the Czech Republic to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the Czech Republic to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for the Czech satellite MAGION 5, which was launched on 29 August 1996 as part of the international scientific project INTERBALL (see annex). The satellite experienced serious defects after the first two days in orbit and was reactivated on 7 May 1998.

* See General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-88280 (E)

Annex

Basic registration data for the Czech satellite MAGION 5*

States which launched the object

The Czech Republic together with the Russian Federation and Austria. The satellite MAGION 5 was manufactured in the Czech Republic in cooperation with Austria and the Russian Federation and was launched into orbit by the Russian spacecraft Interball 2—the "Auroral Probe".

Designation of the space object and its registration number

MAGION 5, 1996-050B (Committee on Space Research (COSPAR) designation)

Date of launch and territory from which it was launched

29 August 1996, from the territory of the Russian Federation (Plesetsk Cosmodrome). The Czech satellite MAGION 5, together with the spacecraft Interball 2, forms part of the INTERBALL Mission.

Initial orbital parameters

Nodal period:	347.46 minutes
Inclination:	62.8 degrees
Apogee:	19,196 kilometres
Perigee:	791 kilometres

General function of the space object

MAGION 5 (MAGnetosphere-IONosphere research satellite) was built in the Czech Republic to work in conjunction with MAGION 4 (1995-039F), Interball 1 (1995-039A) and Interball 2 (1996-050C) satellites for studies of the mechanisms for transporting energy from the solar wind into the magnetosphere.

* The registration data are reproduced in the form in which they were received.

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Note verbale dated 18 September 1999 from the Permanent Mission of the Republic of Korea to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the Republic of Korea to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for objects launched by the Republic of Korea in September 1999 (see annex).

*General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

V.99-88836 (E)

Annex

Registration data for space objects of the Republic of Korea*

Country name:	Republic of Korea
Name of space object:	MuKungHwa-3(KOREASAT-1B)
Date of launch:	5 September 1999
Place of launch:	Kourou, French Guiana
Basic orbital parameters:	Nodal period: 1,436 minutes
	Inclination: 0 degrees
	Apogee height: 35,786 kilometres
	Perigee height: 35,786 kilometres
General function of space object:	Satellite communications and broadcasting services
Other:	Geostationary orbit over 116 degrees East

*The registration data are reproduced in the form in which they were received.

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COMMITTEE ON THE PEACEFUL
USES OF OUTER SPACE

INFORMATION FURNISHED IN CONFORMITY WITH THE CONVENTION ON REGISTRATION OF OBJECTS LAUNCHED INTO OUTER SPACE

Note verbale dated 8 October 1999 from the Permanent Mission of the Russian Federation to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the Russian Federation to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space,* has the honour to transmit the registration data for the Russian space launches for the period from January to June 1999 and also on the space objects which ceased to exist during the same period of time (see annex).

*General Assembly resolution 3235 (XXIX), annex, of 12 November 1974.

*Annex**

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN JANUARY 1999

1. In January 1999, no space objects were launched by the Russian Federation.

2. The following space objects ceased to exist in January 1999 and were no longer in Earth orbit at 2400 hours Moscow time on 31 January 1999:

1970-088A (Meteor-1)
1986-017MV (RS-18)
1996-069A (Cosmos-2335)

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* The registration data are reproduced in the form in which they were received.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN FEBRUARY 1999

1. In February 1999, the Russian Federation launched the following space objects:

No.	Name of space object	Date of launching	Basic orbit characteristics				General purpose of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period (minutes)	
1999-	Soyuz TM-29 (launched by a Soyuz carrier rocket from the Baikonur launch site)	20 February	246·79	193·08	51·66	88·54	Delivery to the Mir manned orbital station of an international crew consisting of the cosmonauts Viktor Afanasyev, Jean-Pierre Haigneré, a French citizen, and Ivan Bella, a Slovak citizen
1999-	Raduga-1 (launched by a Proton carrier rocket from the Baikonur launch site)	25 February	36 488		1·4	1 472	Communications satellite

2. On 9 February 1999, four American GLOBALSTAR satellites intended for mobile telephone communications, data transmission and the location of means of transport were placed in Earth orbit by a Soyuz carrier rocket from the Baikonur launch site.

3. On 15 February 1999, the American television broadcasting satellite TELSTAR 6 was placed in Earth orbit by a Proton carrier rocket from the Baikonur launch site.

4. The following space objects ceased to exist in February 1999 and were no longer in Earth orbit at 2400 hours Moscow time on 28 February 1999:

1998-054A (Soyuz TM-28)
1998-067A (Progress M-40)

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN MARCH 1999

1. In March 1999, no space objects belonging to the Russian Federation were launched.

2. On 15 March 1999, four American GLOBALSTAR satellites intended for mobile telephone communications, data transmission and location of means of transport were placed in Earth orbit by a Soyuz carrier rocket from the Baikonur launch site.

3. On 24 March 1999, an ASIASAT 3C direct television broadcasting satellite was placed in Earth orbit by a Proton carrier rocket from the Baikonur launch site. The satellite was launched on behalf of the company AsiaSat, based in Hong Kong, China.

Note: On 28 March 1999, a full-scale model of a space object was launched on behalf of the American company Hughes by a Zenit-3SL carrier rocket from a floating launch platform in the equatorial zone of the Pacific Ocean. The platform was designed in connection with the international Sea Launch project for commercial launches.

4. At 2400 hours Moscow time on 31 March 1999, no space objects had been found to have ceased to exist in Earth orbit in March 1999.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN APRIL 1999

1. In April 1999, the Russian Federation launched the following space objects:

No.	Name of space object	Date of launch	Basic orbital elements of object				General purpose of space object
			Inclination (degrees)	Perigee (km)	Anti-apogee (degrees)	Period (minutes)	
1999-014	Progress M-40 Launched by "Soyuz-U" carrier rocket from the Baikonur launch site	3 April	51.6	192.3	51.8	88.9	Delivery to the Mir manned orbital station of consumables and various cargoes
1999-015	INF Launched into Earth orbit from the Mir manned orbital station	10 April	51.6	338	51.8	91.4	Model of the Iridium satellite

2. On 15 April 1999, four American GLOBALSTAR satellites intended for mobile telephone communications, data transmission and the location of means of transport were launched into Earth orbit by a Soyuz carrier rocket from the Baikonur launch site.

3. On 21 April 1999, the Bright-1000 satellite GeoSAT-12, intended for communications and remote Earth sensing, was launched into Earth orbit by a Proton carrier rocket from the Baikonur launch site.

4. On 29 April 1999, the German ABRIXAS satellite (for research of X-ray radiation from space) and the Italian MEGSAT satellite (carrying a technological experiment concerning information transmission for private users) was placed in Earth orbit by a Cosmos carrier rocket from the Kapustin Yar launch site.

5. At 2400 hours Moscow time on 30 April 1999, no space objects had been found to have ceased to Earth orbit in April 1999.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN MAY 1999

1. In May 1999, no space objects belonging to the Russian Federation were launched.

2. On 21 May 1999, the Canadian NIMIQ television and radio broadcasting satellite was placed in Earth orbit by a Proton carrier rocket from the Baikonur launch site.

3. At 2400 hours Moscow time on 31 May 1999, no space objects had been found to have ceased to exist in Earth orbit in May 1999.

REGISTRATION DATA ON SPACE OBJECTS LAUNCHED BY THE RUSSIAN FEDERATION IN JUNE 1999

1. In June 1999, no space objects belonging to the Russian Federation were launched.

2. On 18 June 1999, the direct television broadcasting satellite ASTRA 1H for transmission to European countries was placed in Earth orbit by a Proton carrier rocket from the Baikonur launch site. The satellite is owned and operated by the European Satellite Society (ESS).

3. At 2400 hours Moscow time on 30 June 1999, no space objects had been found to have ceased to exist in Earth orbit in June 1999.

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Note verbale dated 3 November 1999 from the Permanent Mission of Sweden to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Sweden to the United Nations (Vienna) presents its compliments to the Secretary-General and has the honour to provide additional information in accordance with article IV, paragraphs 2 and 3, of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex).

The scientific satellite Astrid-2 (registration number 1998-72B, see document ST/SG/SER.E/352) ceased functioning on 24 July 1999.

The Swedish satellite Sirius-3 (registration number 1998-56B, see document ST/SG/SER.E/349) will remain in its orbital position, 28.2° E, during the entire month of November, contrary to what was communicated in the aforesaid note.

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Note verbale dated 11 November 1999 from the Permanent Mission of China to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of China to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex), has the honour to transmit the registration data for objects launched by China in October 1999 (see annex).

Annex

Registration data on space objects launched by China*

1. On 14 October 1999, China launched the following space objects:

Number	*Name of space object*	*Date of launching*	*Basic orbital characteristics*				*General function of space objects*
			Nodal period (minutes)	*Inclination (degrees)*	*Apogee radius (km)*	*Perigee radius (km)*	
1999/010A**	China Brazil Earth Resources Satellite (CBERS) (launched by LM-4B launcher from Taiyuan Satellite Launch Centre, China)	14 October 1999	100	98.5	778	765	CBERS is a Sun-synchronous Earth orbit resource satellite.
1999/010B**	Brazil Scientific Application Satellite (SACI-1) (launched by LM-4B launcher from Taiyuan Satellite Launch Centre, China)	14 October 1999	100	98.5	755	730	SACI-1 is a scientific application satellite made by Brazil, piggyback-launched by LM-4B launcher.

** "1999" indicates the registration year of the space object launched; "010" indicates the serial number of registered space objects at the China National Space Administration (CNSA); "010A" or "010B" indicates two space objects launched by one launcher.

2. The above parameters of 1999/010B are the initial orbit parameters of the satellite. The Instituto Nacional de Pesquisas Espaciais of Brazil is responsible for the SACI-1 orbital operation and should provide the orbit parameters.

CNSA/REG.NO.03**

5 November 1999 ***

* The registration data are reproduced in the form in which they were received.

** Serial number of the CNSA space object registration form.

*** CNSA registration date.